AMENDMENTS TO THE CLAIMS

1. (Cancelled).

2. **(Currently Amended)** A method for producing a steel rail having a high content of carbon in mass%,

C: more than 0.85% but less than or equal to 1.40%,

Si: 0.05 to 2.00%,

Mn: 0.05 to 2.00%,

B: 0.0001 to 0.0050%,

N: 0.0060 to 0.0200%,

V: 0.005 to 0.500%,

Nb: 0.002 to 0.050%,

optionally one or more selected from

Cr: 0.05 to 2.00%,

Mo: 0.01 to 0.50%,

Co: 0.003 to 2.00%,

Cu: 0.01 to 1.00%,

Ni: 0.01 to 1.00%,

Ti: 0.0050 to 0.0500%,

Mg: 0.0005 to 0.0200%,

Ca: 0.0005 to 0.0150%,

Al: 0.0100 to 1.00%, and

Zr: 0.0001 to 0.2000%, and

~~V: 0.005 to 0.500% and~~

~~Nb: 0.002 to 0.050%, and~~

the balance being Fe and unavoidable impurities, comprising:

finish rolling said rail in three or more passes, with a reduction rate per pass of a cross-section of said rail of 2-30% so as to precipitate V-carbide, V-nitride, V-carbonitride, Nb-carbide, and Nb-carbonitride in austenite structure in said rail during said finish rolling,

wherein conditions of said finish rolling satisfy the following relationship:

$S \leqq CPT2 \leqq 0.70$

wherein CPT2 is the value expressed by the following expression 2,

$CPT2 = 2400 / (C \times T \times P)$ (expression 2)

wherein

S is the maximum rolling interval time (seconds) and is more than or equal to 0.10 seconds and less than or equal to[[0.85]] 0.70 seconds, and

$(C \times T \times P)$ is defined as follows;

C is the carbon content of the steel rail in mass%, and

T is the maximum surface temperature (°C) of a rail head, and P is the number of passes, which is 3 or more.

3-16. (Cancelled).

17. (Previously Presented) The method according to claim 2, wherein chemical composition(s) included in said rail meet the following relationship:

$0.30 \geqq V(mass\%) + 10 \times Nb(mass\%) + 5 \times N(mass\%) \geqq 0.04$.

18. (Previously Presented) The method according to claim 2, further comprising:

immediately after said finish rolling, cooling the surface of said rail head at a cooling rate of 2-30°C/sec. until the surface temperature reaches 950-750°C.

19. (Previously Presented) The method according to claim 18, further comprising:

after said cooling step, when the temperature of the rail head is more than 700°C, cooling the surface of the rail head at a cooling rate of 2-30°C/sec. until the surface temperature reaches at least 600°C; and then

allowing the rail to further cool at room temperature.

20. (Previously Presented) The method according to claim 2, further comprising:

after said finish rolling process, when the temperature of the rail head is more than 700°C, cooling the surface of the rail head at a cooling rate of 2-30°C/sec. until the surface temperature reaches at least 600°C, and then

allowing the rail to further cool at room temperature.

21. (Cancelled).

22. (Previously Presented) The method according to claim 2, wherein the rail contains, in mass%, Zr: 0.0001 to 0.2000%.

23. (Previously Presented) The method according to claim 2, wherein conditions of said finish rolling satisfy the following relationship: $S \leqq CPT2 \leqq 0.59$.